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abbreviations:

BMI: body mass index

CPP: Collaborative Perinatal Project

DHEAS: Dehydroepiandrosterone sulfate

ND: not detected

o,p'-DDT: 1,1,1-trichloro-2-(*o*-chlorophenyl)-2-(*p*-chlorophenyl)-ethane

p,p'-DDE: 1,1-dichloro-2,2-bis(*p*-chlorophenyl)-ethylene

p,p'-DDT: 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)-ethane

PBPP: Philadelphia Blood Pressure Project

SEI: socioeconomic index

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Abstract

DDT, a pesticide once used widely in agriculture and now limited to public health use, remains a controversial chemical due to a combination of benefits and risks. DDT or its breakdown products are ubiquitous in the environment and in humans. Compounds in the DDT family have endocrine actions and have been associated with reproductive toxicity. A previous study reported associations between prenatal exposure to p,p'-DDE and increased height and weight in adolescent boys. We examined a group with higher exposures to see whether similar associations would occur. Our study group was 304 males born in Philadelphia in the early 1960s who had participated in a previous study. Anthropometric and pubertal measures from one to six visits during their adolescent years were available, as were stored maternal serum samples from pregnancy. We measured p,p'-DDE, p,p'-DDT and o,p'-DDT in the maternal serum. Outcomes examined in the boys were height, ratio of sitting height to height, body mass index, triceps skinfold thickness, ratio of subscapular to the sum of triceps and subscapular skinfold thicknesses, skeletal age, serum testosterone, and serum dehydroepiandrosterone sulfate. No associations between prenatal exposure to any of the DDT compounds and any outcome measure were seen.